changes, thru the presence of microorganisms in the gut, are more likely.

The adaptive quality of this power to sustain loss of water without loss of life is manifest, when we remember the fact that earthworms must meet considerable range of variation in the moisture of the soil crust which they inhabit.

LIFE BEHAVIOR OF ASCARIS

Ransom and Foster (Baltimore meeting of the American Society of Zoologists, 1918) report interesting points in the life history of *Ascaris lumbricoides*. It was found by them that partial development may take place in many hosts which are not suitable for the complete life history. Rats and mice are less favorable than lambs and goats. The partial development in the rats and mice led Stewart to believe that these animals were the intermediate hosts of the Ascaris found in man and the pig.

The normal life behavior is stated as follows: Eggs after being swallowed hatch in the intestine. Shortly after hatching the larvae occur in the portal vein and the liver. The lungs, reached thru the circulation, are a point of rapid development. The larvae pass back to the intestine by way of trachea and esophagus. If the animal is a suitable host mature development is reached here. If not, the larvae are lost with the feces.

REVERSAL OF ORIENTATION TO LIGHT

Mast (J. Exp. Zool. Jan. 1919) records that Volvox and Pandorina react similarly to light. He finds dark-adapted colonies which are usually positive in weak illumination and negative in strong. Light-adapted colonies are sometimes positive in strong and negative in weak light.

If dark-adapted colonies are exposed to continuous illumination they suffer a series of reversals of orientation, the time required for which depends on the intensity of light. They are neutral for a short time; then become positive, passing thru a maximum; after this they become neutral again; then they become negative, passing thru a maximum; again they become neutral, and then pass finally into a positive state.

Green and blue rays are most influential both in stimulation and in producing the reversal of orientation. This sense of orientation is